

Patent Claims

1. A heat exchanger with fixing elements comprising predetermined points of fracture, in particular in a motor vehicle, characterized by the features
- at least one of the fixing elements comprises a first area and a second area (6, 7; 12, 14) with a quick-acting connection between these two areas (6, 7; 12, 14),
 - in each case one of the two areas (6; 12) is an inseparable component of the heat exchanger (1),
 - when the quick-acting connection is closed, the two areas (6, 7; 12, 14) engage positively with one another with a fixing effect,
 - the connection means of one of the two areas (6, 7; 12, 14) are provided with at least one predetermined point of fracture,
 - the connection means provided with the at least one predetermined point of fracture is located on the area (7, 14) which can be separated from the heat exchanger (1).
2. The heat exchanger as claimed in claim 1, characterized in that the first area and the second area (6, 7) of a fixing element in a quick-acting connection engage with one another in the manner of a dovetail connection.
3. The heat exchanger as claimed in claim 2, characterized in that the predetermined point of fracture is provided at least in one of the webs (10) of the area (7) which can be separated from the heat exchangers.
4. The heat exchanger as claimed in claim 1, characterized in that the first area and the second area (12, 14) of a fixing element engage with one another in a telescopic manner.

5. The heat exchanger as claimed in claim 4, characterized in that the predetermined point of fracture is provided in that area (14) of the areas (12, 14) of the fixing element which engage with one another in a telescopic manner which can be separated from the heat exchanger (1) by means of the quick-acting connection.

6. The heat exchanger as claimed in one of the preceding claims, characterized in that that area (7, 14) of a quick-acting connection which can be separated from the heat exchanger (1) projects to outside the connection for fixing in a complementary bearing of a support (4, 5) supporting the heat exchanger (1).

7. The heat exchanger as claimed in one of the preceding claims, characterized in that the heat exchanger (1) is provided equally with quick-acting connections as claimed in claims 2 and 4.

8. The heat exchanger as claimed in one of the preceding claims, characterized in that a quick-acting connection as claimed in claim 2 forms the connection to a lower support (5) supporting the heat exchanger (1) and that as claimed in claim 4 forms the connection to a corresponding upper support (4).

9. A heat exchanger with a mounting between an upper support and a lower support lying roughly in a common vertical plane, characterized by the features

- quick-acting connections as claimed in claim 2 connect the heat exchanger (1) to the lower support (5),
- quick-acting connections as claimed in claim 4 connect the heat exchanger (1) to the upper support (4),

- in each case those parts of the quick-acting connection means which can be separated from the heat exchanger (1) engage in the supports (4, 5).

5 10. The heat exchanger as claimed in claim 9, characterized in that in quick-acting connections as claimed in claim 4 the separable areas are in each case designed as sleeves (14) and can in each case be pushed
10 through the associated support (4, 5) onto the inseparable area of the fixing elements provided on the heat exchanger (1), the sleeves (14) in this state being designed so as to be fixable in the associated support (4, 5).